

Abstract

A bearing device mountable on a smaller bearing and allowing to be automatically lubricated for a long period, comprising an inner ring (2) and an outer ring (1) rotated relative to each other, cages and rolling elements (3) held by the cages which are disposed in an annular space between the inner and outer rings, a seal ring (5) disposed on both sides of the inner and outer rings, and a unit body (7) formed of a battery (6), a tank (8) for storing lubricant, and a pump (10) sucking and discharging the lubricant from the tank (8) which is disposed between the outer ring (1) and the inner ring (2) detachably from the seal ring (5), wherein the lubricant is discharged from the pump (10) into the annular space in which the rolling elements (3) are disposed and the discharged amount of the lubricant from the pump is controlled by a sensor and a control circuit, and the unit body (7) is formed detachable, whereby a lubrication unit installed in the bearing can be made compact and slim.